Claims

1. A work platform for use in performing work operations on a work object, the work operations being selected from construction, repair, maintenance, servicing and dismantling or disassembly work, the work platform including an upper work surface on which a worker can move about on the platform, and a safety barrier around at least part of the periphery of the upper work surface, the work platform further including support means for supporting the work platform in an operative position a short distance above the work object so that the worker can perform work operations on the work object below the platform, the upper work surface including at least one access section which enables access to an area of the work object below the work surface where the access section is located, the upper work surface further including at least one support section adjacent the access section so that the worker can remain on the support section of the work surface and can gain access to and can perform work operations in or on the area of the work object below the adjacent access section, the work platform further including a transfer space through or adjacent the work surface and arranged to enable materials and articles used in performing the work operations to be transferred from the work platform through the transfer space into position beneath the work platform for use in or on the work object and to enable such materials and articles removed by the worker from the work object beneath the work platform to be transferred through the transfer space and onto the work platform for storage and/or removal.

2. A work platform as claimed in Claim 1 wherein work object comprises a roof structure of a building and wherein the materials and articles used in performing the work operations include roofing materials, the transfer space comprising an elongated slot through which the roofing materials including elongated members such as roof purlins and sheet materials such as roofing sheets or decking sheets can be passed.

3. A work platform as claimed in Claim 2 wherein the transfer space is dimensioned so that the worker cannot pass through the transfer space from a position atop the work surface to a position beneath the work platform from where the worker may fall from the platform or from the roof structure.

4. A work platform as claimed in Claim 2 wherein the upper work surface of the work platform has two work sections consisting of a roof construction work section having the one or more access sections and a material storage section, the material storage section providing an area for roofing materials to be carried and stored thereon while the work platform is moved into its operative position preparatory to roof construction work and while the work platform is being removed from its operative position after the roof construction work has been performed.

5. A work platform as claimed in Claim 4 wherein the roof construction work section of the work surface is at an elevated upper level above a lower level of the material storage section of the work surface.

6. A work platform as claimed in Claim 5 wherein the transfer space comprises an elongated transfer slot in the step formed between the upper level of the roof construction work section and the lower level of the material storage section, the elongated slot being arranged to enable roofing materials to be moved generally horizontally from the work surface when being transferred through the transfer slot to a position below the roof construction work section and, conversely, the roofing materials can be transferred horizontally back through the transfer slot directly onto the lower level material storage section.

7. A work platform as claimed in Claim 5 wherein at least one removable barrier is provided to inhibit or prevent roofing materials inadvertently passing through the transfer space during raising and lowering of the work platform between the ground and its operative position atop the roof structure.

8. A work platform as claimed in Claim 4 wherein the transfer space is provided in an intermediate area between the roof construction work section and the material storage section.

9. A work platform as claimed in Claim 1 wherein the access section includes a safety barrier enabling a worker to insert his hands past or through the barrier to work on the work object beneath the access section but being operative to prevent a worker falling through the access section from the work platform.

10. A work platform as claimed in Claim 9 wherein the safety barrier is formed by a mesh having relatively large openings.

11. A work platform as claimed in Claim 1 wherein the work object comprises a roof or top surface of a vehicle and wherein the materials and articles used in performing the work operations are selected from vehicle components, vehicle body or top surface panels, machinery, apparatus, and servicing tools and equipment, the transfer space comprising an aperture through or adjacent the work surface through which the materials and articles can be passed.

12. A work platform as claimed in Claim 11 wherein the access section includes a safety barrier enabling a worker to insert his hands past or through the barrier to work on the roof or top surface of the vehicle beneath the access section but being operative to prevent a worker falling through the access section from the work platform.

13. A work platform as claimed in Claim 12 wherein the safety barrier is formed by a mesh having relatively large openings.

14. A work platform as claimed in Claim 12 wherein the safety barrier is selectively movable from its operative position beneath the access section so as to provide a substantially clear and unobstructed open space when the work platform is located in its operative position enabling work operations to be performed on the roof or top surface of the vehicle therebeneath including passing of materials and articles through the open space.

15. A work platform as claimed in Claim 14 wherein the aperture in the work surface which constitutes the transfer space also functions as the access section which enables the access to an area of the vehicle below the aperture, the support section being located adjacent to the aperture.

16. A work platform as claimed in Claim 1 wherein the access section includes at least one removable section which is temporarily removable by the worker to enable access to the area of the work object below the work surface where the removable section has been removed.

17. A work platform as claimed in Claim 16 wherein the or each removable section of the work surface is hinged to a structural frame of the work platform for upward hinging movement to thereby enable access to the area of the work object below the work surface.

18. A work platform as claimed in Claim 16 wherein the or each removable section of the work surface is selectively slidably mounted to a structural frame of the work platform for generally horizontal sliding movement so as to create an opening enabling access to the area of the work object below the work surface.

19. A work platform as claimed in Claim 16 wherein the or each support section of the upper work surface comprises a foot support surface adjacent to a said access section and on which the worker can place his foot or feet so as to be supported while working on the work object through the access section and while standing or moving about on the work platform.

20. A work platform as claimed in Claim 19 wherein the or each foot support surface is permanently mounted as part of the structure of the work platform.

21. A work platform as claimed in Claim 19 wherein the or each foot support surface comprises a foot plate or an elongated tread surface.

22. A method of performing work operations on a work object, the method including the steps of providing a work platform as claimed in Claim 1, lifting the work platform into an operative position on top of the work object, supporting and maintaining the work platform in the operative position so that a worker can perform work on the work object below the work platform, performing work operations on the work structure from a position atop the work surface by accessing the work object through the access

section, and transferring materials and articles between said work platform and the work object by passing the materials and articles through the transfer space through or adjacent the work surface.

23. A method as claimed in Claim 22 wherein a support means provided for supporting the work platform in its operative position a short distance above the work object includes stabilising means operative to restrain the work platform against substantial movement during the performance of work on the work object by the worker.

24. A method as claimed in Claim 23 wherein the work object comprises a roof structure of a building and wherein the materials and articles used in performing the work operations include roofing materials, the stabilising means includes restraining means for co-operating with the roof structure to restrain the work platform against substantial movement, the restraining means including anchoring means which is releasably coupled to the roof structure.

25. A method as claimed in Claim 24 wherein the work platform is suspended by suspension means in its operative position so that at least part of the weight of the work platform, roofing materials carried thereby, working tools, and worker carried thereby is not totally transferred to and supported by the roof structure, and wherein the stabilising means includes releasable arms, guys, or struts which extend between the work platform and the roof structure and which anchor to the roof structure so as to restrain the work platform against substantial movement when it is held suspended in its operative position a short distance above the roof structure.

26. A method as claimed in Claim 24 wherein the work platform includes means for engaging with the roof structure so that at least part of the weight of the work platform, roofing materials carried thereby, working tools, and worker carried thereby is transferred to the roof structure when the work platform is in its operative position, and wherein the means for engaging with the roof structure includes feet which engage with the roof structure, the restraining means including releasable fasteners or attachments for attaching the feet of the work platform to the roof structure.

27. A method of performing work operations on a work object, the method including the steps of providing a work platform as claimed in Claim 11, lifting the work platform into an operative position on top of the work object, supporting and maintaining the work platform in the operative position so that a worker can perform work on the work object below the work platform, performing work operations on the work structure from a position atop the work surface by accessing the work object through the access section, and transferring materials and articles between said work platform and the work object by passing the materials and articles through the transfer space through or

adjacent the work surface, wherein the work platform further includes cushion means located beneath the work platform, the method including the step of positioning the work platform so that the cushion means engages against the roof or top surface of the vehicle and provides a cushioning between the work platform and the roof or top surface of the vehicle but without all of the weight of the work platform bearing on the roof or top surface of the vehicle through the cushion means.

28. A method as claimed in Claim 27 wherein the cushion means comprises at least one flexible and gas filled cushioning compartment or bag located beneath the work platform so as to be interposed between the work platform and the roof or top surface of the vehicle.

29. A method as claimed in Claim 28 wherein the vehicle comprises an aircraft fuselage having a longitudinal dimension extending in the direction from nose to tail of the aircraft, and wherein the cushion means of the work platform comprises at least two elongated gas filled cushions extending in the longitudinal direction of the fuselage so as to bear against the upper surface of the fuselage along laterally spaced lines when the work platform is located in its operative position for enabling performance of the work operations.

30. A method as claimed in Claim 22 and including the further step of providing lifting apparatus for supporting, raising and lowering materials and articles from positions generally above the transfer space.

31. A method as claimed in Claim 30 wherein the work platform is suspended by suspension means in its operative position so that at least part of the weight of the work platform and any load carried thereby is not transferred to and supported by the work object, the lifting apparatus being mounted by the suspension means whereby the weight of materials and articles being supported by the lifting apparatus is predominantly carried by the suspension means and is not substantially transferred to the work platform and thence to the work object.